

Making workplaces safer with wearable technologies

Workplace accidents impact organizations as they struggle to protect their employees. The good news is that with today's advanced technologies, smart wearable devices detect hazards in real-time and make the workplace safer.

Workplace accidents are a cause of concern in modern times. According to the International Labor Organization, there are around [340 million workplace accidents](#) worldwide. Modern workplaces have various factors that increase the likelihood of workplace accidents. It includes working at heights, in confined spaces, with electrical equipment, and with heavy machinery and gear. However, the good news is with the advance in technology like Bluetooth, IoT, sensor devices, and artificial intelligence; technology is available to help prevent workplace accidents. In this article, you can learn more about injuries in the workplace, their causes, and how modern technology-enabled devices like wearable devices help prevent workplace accidents.

Impact of workplace accidents on the organization

Employees desire to work in a safe atmosphere, and it is the organization's responsibility to provide safer working environments. Unfortunately, accidents in the workplace occur sometimes and have long-lasting impacts on workers' lives.

Employees can concentrate better on their activities without exposure to life-threatening dangers. Ensuring their safety can result in improved productivity with lesser fear of workplace accidents. Organizations must implement safety guidelines to safeguard workers and ensure their safety at work.

However, if an accident occurs at the organization, it can result in litigation, the loss of staff, a negative impact on staff morale, and damage to the organization's reputation. Therefore, firms must comply with safety rules and have their employees work in safe environments.

Incorporating technology into workplace safety is no longer optional if you wish to be a modern organization that operates effectively and ethically. Today technology-enabled safety practices help firms to prevent employee injuries, save costs and increase productivity. Every firm should prioritize worker safety.

Common types of injuries at the workplace and their causes.

Here are some common workplace injuries.

1. Slips, Trips, and Falls (STF)
2. Repetitive Strain Injuries (RSI)
3. Mental Stress Injuries
4. Muscular Handling Injuries
5. Machinery and Equipment related Injuries

Employers now highlight the significance of safety and accident prevention, yet, each year, many employees sustain severe injuries, including life and threatening ones. There are many causes of workplace injuries, and the costs are on the higher side. According to current studies, [eighty to ninety percent of catastrophic injuries result from human mistakes.](#)

The risk of accidents at workplaces increases with an aging staff, lesser health, and a stressed workforce. On average, [the cost to cure chronic disease is \\$35 billion, the cost of work injury and illness is \\$28 billion, and back injuries, on average, cost around \\$105,000. Overall, 88% of spending is on post-injury, loss, & disease.](#)

Other elements, such as human behavior, are likely to play a significant part in several accidents, even though bad work conditions and machine/equipment failure may be significant contributors. It does not imply that the employee is always to fault for an event, but rather that there may be underlying reasons that lead to employees' risky behavior.

Some examples of workplace accidents and proactive measures include the following.

- A [South Australian quarry operator](#) and a labor-hire firm were fined almost \$500,000 for a worker's death in 2020. A Kapunda man, age 29, was murdered by rock-crushing equipment. The judge said it was an avoidable accident.
- A Tasmanian man who fell and broke his leg while walking his dog [won his worker's compensation claim](#) after a court ruled it happened during his employment as he was on-call at the time.
- A company took proactive measures to [mitigate heat stress and keep their employees safe](#). Care Flight provides ice vests for frontline workers at its northern operations hangar at Darwin Airport. Without it could lead to health issues for its staff.

Organizations can help with technology solutions to prevent workplace injuries. In the next section, you can learn what technology solutions are available to prevent workplace injuries.

Worker fatalities by industry, 2021



Agriculture, forestry and fishing

10.4

fatalities per
100,000 workers



Transport, postal and warehousing

7.9

fatalities per
100,000 workers



Mining

2.3

fatalities per
100,000 workers

Worker fatalities by industry, 2021

How technology today can help prevent workplace injuries:

When we hear the term "technology in the workplace," the first thing immediately springs to our mind is how technological improvements increase the business's productivity. Technology can help companies' lower workplace accident risks and adhere to safety laws. Moreover, technology can heighten employees' awareness of the possible hazards in the workplace with devices.

In recent years, several technological advancements, including wearable technology, IoT, Drones, artificial intelligence, cloud computing, and machine learning provide safety-enabling platforms and tools. Safety apps and technology devices help identify hazards that may go unnoticed and raise alerts that help protect employees. For example, smartwatches track body temperature, average sweat loss and heart rate and warn a worker if he is near some machinery and he needs to take precautions.

These groundbreaking instruments have enhanced both health and safety. Interconnection between technology-enabled assets helps ensure people's safety in their personal and professional lives. In the next section, you can better understand how wearable technology helps prevent workplace injuries.

How can wearable devices help prevent workplace injuries?

BOOST wearable devices (motion pods, Samsung Smart watches) help prevent injuries at the workplace. It assists in predicting and preventing future injuries and diseases while improving workforce wellness.

The leading cause of occupational injuries is repetitive motions of the lower back, shoulders, and ankles with poor form. The workforce wellness solution by EIL Global delivers a comprehensive analysis of all three factors, resulting in a significantly more comprehensive and accurate risk assessment.

Whenever there is an improper posture or behavior, the devices (including a Samsung smartwatch and BOOST motion pod) warn the user to take corrective measures. Dynamic reports can help analyze how frequently inappropriate behavior occurs. The solution can track and warn about swayed balance by identifying fatigue to prevent slips and falls. Maintaining a safe distance between employees and moving equipment or other personnel is helpful.

Conclusion

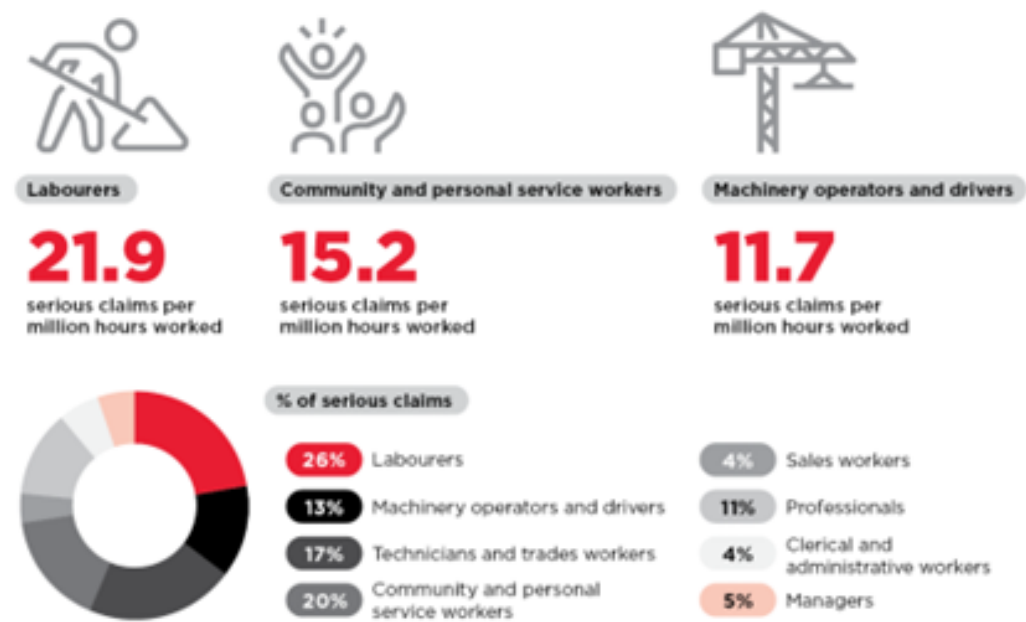
Organizations can leverage technology by equipping workers with wearable devices for real-time and accurate data collection. Alerts and warnings will protect workers from workplace hazards due to quicker reaction times.

Discover how Boost can make your workplace safer today.

[Schedule a demo.](#)

Serious claims by occupation, 2020-21p*

Due to an issue with processing occupational data for a small proportion of workers' compensation claims, this part of the report was updated 22 November 2022.



Serious claims by occupation, 2020-21p*

[Source](#)